IN THE CLAIMS

Please amend the claims as follows:

1-13. (Canceled)

14. (Currently Amended)   A programmer for a user to program a pulse generator with detection enhancements for use by the pulse generator to detect a clinical rhythm and selectively apply therapy for the detected clinical rhythm, the programmer comprising:

a first module for receiving a user-provided selection of a clinical rhythm, wherein the programmer is programmed to associate the clinical rhythm is associated with available detection enhancements that are made available and, based on the selected clinical rhythm, to make the available detection enhancements available for selection by the user to add specificity for the pulse generator to determine determining when to deliver shock therapy for the selected user-provided selection of the clinical rhythm, wherein:

the available detection enhancements are sets of rules used by the pulse generator to determine for determining when to deliver shock therapy for the selected clinical rhythm; and

the first module is preprogrammed to provide a preprogrammed selection of at least one detection enhancement from the available detection enhancements that are associated with the user-provided selection of the clinical rhythm; and

a second module for receiving a user-provided selection to modify the preprogrammed selection of the at least one detection enhancement provided by the preprogrammed first module to at least one other detection enhancement from the two or more available detection enhancements that are associated with the user-provided selection of the clinical rhythm, wherein the programmer is adapted to program the pulse generator to detect the clinical rhythm using the preprogrammed selection of at least detection enhancement as a default, and with the user-provided detection enhancement selection if the user provided the user-provided detection enhancement selection.

15. (Currently Amended)   The programmer of claim 14, wherein the at least one detection enhancement has at least one parameter, the first module is preprogrammed to provide a preprogrammed setting for the at least one parameter for the at least one detection enhancement, and the second module is used to receive a user-provided selection to modify the setting for the at least one parameter for the at least one detection enhancement.

16. (Previously Presented)   The programmer of claim 14, further comprising a communication module for communicating with a pulse generator to program the pulse generator with the at least one detection enhancement.

17. (Previously Presented)   The programmer of claim 14, further comprising a programmer screen, wherein the second module provides a number of screen displays on the programmer screen, and the number of screen displays are layered such that a first screen provides a capability to activate the at least one detection enhancement which is seeded with at least one parameter, and a second screen provides a capability to change the at least one parameter for the at least one detection enhancement.

18. (Currently Amended)   A programmer, comprising:
    a selection module for receiving a selection of a clinical rhythm from a user, wherein the programmer is programmed to associate the clinical rhythm is associated with available detection enhancements wherein the available detection enhancements are sets of rules used by a pulse generator to determine when the pulse generator is to deliver shock therapy and each detection enhancement includes at least one parameter, wherein the selection module is adapted to respond to the selection of the clinical rhythm by the user to make the available detection enhancements being made available based on the selected clinical rhythm for selection by the user to add specificity for use by the pulse generator to determine determining when to deliver shock therapy for the selected clinical rhythm, wherein the selection module includes artificial intelligence adapted to automatically select a detection enhancement from the available detection enhancements, and automatically provide a setting for the at least one parameter for the automatically selected detection enhancement, the selection module being adapted to receive a

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~~user provided~~ user-provided selection of at least one other detection enhancement from the available detection enhancements in place of the detection enhancement automatically selected by artificial intelligence;

a parameter modification module for receiving a user input to change the automatically-provided setting for the at least one parameter of the selected detected enhancement; and

a communication module for communicating with a pulse generator to program the pulse generator with the automatically selected detection enhancement or the user-provided selection of at least one of the detection enhancements for use by the pulse generator to detect the ~~selected~~ clinical rhythm and the associated at least one detection enhancement.

19. (Currently Amended)   The programmer of claim 18, wherein the selection module provides a capability for the user to select a number of tachyarrhythmia zones that are associated with the at least one parameter.

20. (Currently Amended)   The programmer of claim 19, wherein the parameter modification module provides a [[the]] capability for the user to change detection parameters for the number of tachyarrhythmia zones.

21. (Currently Amended)   The programmer of claim 19, wherein the parameter modification module provides a [[the]] capability for the user to change therapy parameters for the number of tachyarrhythmia zones.

22. (Previously Presented)   The programmer of claim 18, wherein the parameter modification module provides at least one indicator for indicating whether a changed parameter has been programmed in the pulse generator.

23. (Currently Amended)   The programmer of claim 18, wherein the artificial intelligence is adapted to track ~~tracks~~ parameter interaction among the set parameters and the changed parameters, and provide ~~provides~~ at least one warning indicator for at least one parameter interaction.

24. (Previously Presented)   The programmer of claim 18, wherein the <u>available</u> detection enhancements include a V Rate > A Rate enhancement for delivering therapy when a detected ventricular rate is determined to be greater than a detected atrial rate.

25. (Currently Amended)   The programmer of claim 18, wherein the <u>available</u> detection enhancements <u>made available by the selection module for selection by the user</u> include an AFib Rate Threshold enhancement for inhibiting ventricular therapy when a detected atrial rhythm is determined to be faster than a threshold.

26. (Currently Amended)   The programmer of claim 18, wherein the <u>available</u> detection enhancements <u>made available by the selection module for selection by the user</u> include a Stability enhancement for inhibiting ventricular therapy when a detected atrial rhythm is determined to be unstable.

27. (Currently Amended)   The programmer of claim 18, wherein the <u>available</u> detection enhancements <u>made available by the selection module for selection by the user</u> include an Onset enhancement for inhibiting a therapy when a detected cardiac rate is determined to increase gradually.

28. (Currently Amended)   The programmer of claim 18, wherein the <u>available</u> detection enhancements <u>made available by the selection module for selection by the user</u> include a Shock If Unstable enhancement when a ventricular rhythm is determined to be unstable.

29. (Currently Amended)   The programmer of claim 18, wherein the <u>available</u> detection enhancements <u>made available by the selection module for selection by the user</u> include a Sustained Rate Duration (SRD) enhancement for overriding an inhibit therapy enhancement when a detected rate continues throughout a programmed time period.

30. (Previously Presented)   The programmer of claim 18, wherein the at least one parameter includes at least one cardiac rhythm parameter that indicates when the at least one detection enhancement for the selected clinical rhythm applies.

31. (Currently Amended)   A programmer for a user to program a pulse generator <u>with detection enhancements for use by the pulse generator</u> to detect a clinical rhythm and apply therapy for the detected clinical rhythm, comprising:

      a communications module for communicating with the pulse generator;

      control logic for programming the pulse generator using the communications module, wherein the control logic is adapted to program the pulse generator to detect and provide therapy for at least one clinical rhythm ~~where~~<u>, to associate</u> the clinical rhythm ~~is associated~~ with available detection enhancements, to program the pulse generator with at least one selected detection enhancement from the available detection enhancements associated with the at least one clinical rhythm, and to program the pulse generator with at least one parameter for the at least one selected detection enhancement; and

      a display connected to the control logic to provide a number of screen displays used by the user to select the at least one clinical rhythm and modify the selection of the at least one detection enhancement from at least one preprogrammed detection enhancement to at least one other detection enhancement from the available detection enhancements associated with the at least one clinical rhythm.

32. (Previously Presented)   The programmer of claim 31, wherein the at least one selected detection enhancement is automatically seeded with a value for the at least one parameter, and the number of screen displays are used by the user to change the value for the at least one parameter.

33. (Currently Amended)   The programmer of claim 32, wherein the number of screen displays are layered such a first screen display provides [[a]] the user with the ability to select the at least one detection enhancement, and a second screen provides the user with the ability to change the value for the at least one parameter.

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34. (Previously Presented)   The programmer of claim 33, wherein the first screen includes a number of tachyarrhythmia zones, and the number of tachyarrhythmia zones ranges between one and three zones as determined by a user input.

35. (Previously Presented)   The programmer of claim 34, wherein each of the number of tachyarrhythmia zones includes a detection button, and selecting the detection button displays the second screen used to change detection parameters for at least one of the number of tachyarrhythmia zones.

36. (Previously Presented)   The programmer of claim 34, wherein each of the number of tachyarrhythmia zones includes a therapy button, and selecting the therapy button displays the second screen used to change therapy parameters for the number of tachyarrhythmia zones.

37. (Previously Presented)   The programmer of claim 33, wherein the first screen displays detection enhancement rhythm discrimination categories.

38. (Previously Presented)   The programmer of claim 33, wherein the first screen provides an ECG display.

39. (Previously Presented)   The programmer of claim 31, wherein the detection enhancements include at least one inhibit therapy enhancement for inhibiting the therapy for the at least one clinical rhythm.

40. (Previously Presented)   The programmer of claim 39, wherein the detection enhancements include at least one override enhancement for overriding the inhibit therapy enhancement.

41. (Previously Presented)   The programmer of claim 40, wherein the at least one inhibit therapy enhancement includes an AFib Rate Threshold enhancement for inhibiting ventricular therapy when a detected atrial rhythm is faster than a threshold.

42. (Previously Presented)   The programmer of claim 40, wherein the at least one inhibit therapy enhancement includes a Stability enhancement for inhibiting ventricular therapy when a detected atrial rhythm is determined to be unstable.

43. (Previously Presented)   The programmer of claim 40, wherein the at least one inhibit therapy enhancement includes an Onset enhancement for inhibiting a therapy when a detected rate increases gradually.

44. (Previously Presented)   The programmer of claim 40, wherein the at least one override inhibit enhancement includes a V Rate > A Rate enhancement for delivering therapy when a detected ventricular rate is greater than a detected atrial rate.

45. (Previously Presented)   The programmer of claim 40, wherein the at least one override inhibit enhancement includes a Shock if Unstable enhancement when a ventricular rhythm is determined to be unstable.

46. (Previously Presented)   The programmer of claim 40, wherein the at least one override inhibit enhancement includes a Sustained Rate Duration (SRD) enhancement for overriding an inhibit therapy enhancement when a detected rate continues throughout a programmed time period.